

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI DRAINAGE—continued					
Neosho—Continued.	<i>Feet</i>			<i>Feet</i>	
Iola, Kans.....	15	12	18	22.1	13
Oswego, Kans.....	17	7	7	17.5	7
		15	22	25.1	19
Fort Gibson, Okla.....	22	7	7	23.5	7
Cottonwood: Emporia, Kans.....	20	12		29.9	13
Canadian: Logan, N. Mex.....	4			5.0	7
Sulphur: Ringo Crossing, Tex.....	20	8	9	21.0	8
WEST GULF DRAINAGE					
Trinity:					
Dallas, Tex.....	25	7	9	29.6	7
Trinidad, Tex.....	28	10	13	30.3	12
PACIFIC DRAINAGE					
Gila: Kelvin, Ariz.....	5	27	29	16.0	28

## MEAN LAKE LEVELS DURING SEPTEMBER, 1926

By UNITED STATES LAKE SURVEY

[Detroit, Mich., October 5, 1926]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes <sup>1</sup>			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during September, 1926:				
Above mean sea level at New York	<i>Feet</i> 601.30	<i>Feet</i> 578.51	<i>Feet</i> 571.43	<i>Feet</i> 244.86
Above or below—				
Mean stage of August, 1926	+0.32	-0.08	+0.13	-0.13
Mean stage of September, 1925	-0.15	+0.29	+0.50	+0.30
Average stage for September, last 10 years	-1.18	-1.83	-0.77	-1.02
Highest recorded September, stage	-2.78	-4.92	-2.51	-2.75
Lowest recorded September, stage	-0.15	+0.29	+0.50	+0.86
Average departure (since 1860) of the September level from the August level	+0.05	-0.20	-0.26	-0.40

<sup>1</sup> Lake St. Clair's level: In Sept., 1926, 547.01 feet.

## EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, SEPTEMBER, 1926

By J. B. KINCER

**General summary.**—Over a considerable area extending from the Ohio and extreme lower Missouri Valleys northward, frequent rains and cloudy weather were unfavorable for farming operations and for maturing fall crops, as the soil was usually too wet for proper working. There was also considerable delay in harvesting crops and in late threshing, with complaint of root crops rotting.

In the South, the generally warm weather and light to moderate rain made favorable conditions, except that soil moisture was insufficient for minor crops in the south Atlantic section and some Gulf districts. Except for wet soil and flooding in some eastern districts of the central plains States, conditions were generally favorable throughout the plains area and also west of the Rocky Mountains, wherever it was not too dry. Rain was badly needed in parts of the Great Basin, and there was insufficient moisture locally in the Pacific Northwest.

Crops suffered heavy loss in a limited area in extreme southern Florida and some extreme southern sections along the east Gulf coast by the severe hurricane of the 18th-20th. The greatest loss in southern Florida

was to citrus fruit (chiefly grapefruit) and in other sections to open cotton. A detailed description of this storm will appear in the October REVIEW.

**Heavy-to-killing frost** damaged late crops over a considerable area of the Northwest during the latter part of the month. Late vegetation and immature corn suffered considerably over a belt extending from Michigan, northwestern Illinois, extreme northern Missouri, and northwestern Kansas northward, but in much the greater part of this area the bulk of staple crops had matured, and damage from a general production standpoint was comparatively small. No other material frost damage occurred, as harmful temperatures did not extend into the interior valley States.

**Small grains.**—Frequent rains and continued wet soil were unfavorable for the preparation of seed beds and for the seeding of winter wheat quite generally from the lower Missouri and upper Mississippi Valleys eastward to the Appalachian Mountain districts. At the close of the month wheat seeding had become considerably delayed in this area. South of the Ohio River, and quite generally throughout the Great Plains, conditions were much better and seeding made favorable progress in these sections. Wheat needed more moisture, however, in the west-central plains, especially in western Kansas, and it was too dry in parts of the Southeast, as well as in some far northwestern districts. The freeze damaged late flax in the northern Great Plains, but most of the crop had matured previously. The harvest of rice advanced satisfactorily with favorable weather, while grain sorghums in the lower Great Plains were mostly mature at the close of the month.

**Corn.**—The mostly cool, wet, and cloudy weather over the northern half of the country east of the Great Plains was decidedly unfavorable for maturing corn. The crop ripened very slowly, only about one-fourth of it being safe from frost in the upper Mississippi Valley by the middle of September. In the Great Plains area and generally throughout the South maturity was more rapid with better drying weather prevailing. Frost damaged late corn considerably in parts of the Northwest about the 25th, the damaging temperatures extending as far east as the western Lake region. Most of the crop in this area had matured, however, and no widespread serious harm occurred, except through lowering of grade. Elsewhere in the principal corn sections the temperature did not go low enough to be harmful.

**Cotton.**—The persistently warm weather and mostly light to moderate rainfall were favorable for the cotton crop in most sections, though part of the month was too cloudy and wet in the northern portion of the belt west of the Mississippi River. In most districts the warm and generally sunshiny weather favored rapid opening of bolls, and also good progress of the harvest.

**Miscellaneous crops.**—In the far Southwest sufficient rain fell to benefit the range materially but in the Great Basin the continued drought was detrimental. In the central and eastern portions of the country meadows and pastures continued generally good for the season, though grass lands needed more moisture in southeastern districts. Potatoes were damaged somewhat by frost in the western Lake region, and wet weather interfered with harvest to a considerable extent in the Ohio Valley; elsewhere conditions were generally favorable. Sugar cane made fair to good progress in Louisiana, and the weather was mostly favorable for sugar beets. Apples and other fruits suffered considerable damage from freezing weather in the far Northwest.